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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,221	08/19/2003	Yasuhiro Yoshioka	2870-0264P	3448
2292	7590	10/10/2006		EXAMINER
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				CHEA, THORL
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/643,221	YOSHIOKA ET AL.
	Examiner Thorl Chea	Art Unit 1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11 July 2006.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5 and 10-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5 and 10-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. 09/695,864.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

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## **DETAILED ACTION**

1. This office action is responsive to the amendment on July 11, 2006; claims 1-5, 10-21 are pending; claims 6 and 9 have been canceled.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-5, 10-11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Miura et al (U.S. Patent No. 6,248,512).

Miura discloses a photothermographic material having composition similar to that of the claimed invention. Note for instance the material in column 47-50, example 1, and sample in Table 1, which contains a phenol compound as reducing agent. The hindered phenol compounds are preferred reducing agent is disclosed in column 31-32. The compounds in columns 12-14 which

are read on the compound of formula (IV) wherein two or more of R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>42</sup>, R<sup>44</sup>, and R<sup>45</sup> may be taken together to form a ring, especially compounds A-29, A-36 which contains a carbonyl group directly connected to nitrogen atoms and formed a ring. This compound is within the scope of compound of formula (IV) when at least R<sup>41</sup> and R<sup>42</sup> and R<sup>44</sup> and R<sup>45</sup> may be taken together to form a ring. See also the compounds B1, B2, B3, B5, B9-B12 in columns 15-16 which contains a carbonyl group directly linked to alkyl group, aryl group and heterocyclic group and the nitrogen atom substituted with an alkyl groups. These compounds within the scope of the compound of formula (IV) contains -N(R<sup>41</sup>)(R<sup>42</sup>) wherein R<sup>41</sup> and R<sup>42</sup> represents an alkyl, an aryl or heterocyclic group, and R<sup>43</sup> represent an alkyl group. These compounds are similar to that of the groups presented in the specification as having hydrogen bond formation rate constant kf of 20-4000. Thus, the compounds having hydrogen bond formation rate constant kf of 20-4000 presented in the claimed invention is inherent to that taught in Miura. In the absence of showing otherwise, the examiner asserts that the claimed invention is either anticipated or would have been prima facie obvious over Miura.

5. Claims 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bojora et al (US Patent No 3,667,959) and Miura et al (US Patent No. 6,248,512).

Bojora et al disclose a photosensitive and thermosensitive element containing sulfonyl group including that claimed in the present claimed invention in a photothermographic material such as the preferred compound in column 3, lines 10, 30column 3, lines 10, 30, 65; the silver behenate, phenolic reducing agent, binder and photosensitive silver halide in column 5, lines 5-12. The silver halide is chemically sensitized with chemical sensitizer such as sulfur, selenium or

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tellurium compound (column 6, lines 17-26). Miura et al disclose the use of metal complexes of the metal belonging to Group VIII in column 27, lines 60-67. See also the hindered phenol in columns 31-32, and the polyhalogenate compound such as tribromomethylsulfonyl pyridine in column 48, line 38.

Bojora et al do not disclose the metal or metal complex Group VIII to Group X presented in the claimed invention, but it has been known in Miura et al to use the metal complex to increase the sensitivity of silver halide grains. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to dope the silver halide with the metal taught in Miura et al to increase the sensitivity thereof, and thereby provide a material as claimed.

*Response to Arguments*

6. Applicant's arguments filed on July 11, 2006 have been fully considered but they are not persuasive because of the reason set forth above because of the reason set forth in the rejection above. There is no difference between the compounds taught in Miura et al. The argument with respect to claims 1-5, 10-11 is not persuasive for the reason set forth in the paragraph 4 above. The argument in Section 11 is not persuasive for the new ground of rejection set forth in paragraph 5 above.

*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea  
September 27, 2006

*Thorl Chea*  
Thorl Chea  
Primary Examiner  
Art Unit 1752